



North Carolina is growing—in population, business and employment and transportation revenues are not keeping pace. This presents a special set of challenges for our state. As a result, the N.C. Department of Transportation is seeking innovative ways to improve our existing transportation network, grow the state's economy and enhance the quality of life in North Carolina. Two of the options available to help us are managed lanes and public-private partnerships.

### **What are managed lanes?**

Managed lanes are designated lanes that allow drivers to choose to pay a toll for more reliable, rapid travel through a corridor. Toll fees will vary depending on the time of day and traffic volume (value pricing). Transit vehicles, motorcycles, emergency vehicles, and eligible carpoolers with three or more occupants may continue using the lanes free of charge.

### **Why do we need them?**

North Carolina faces increasing demand to improve the state's infrastructure to accommodate its growing population. Limited funding, right-of-way restrictions and environmental concerns make adding more lanes an increasingly complex challenge. Managed lanes are emerging as the most practical solution for improving mobility and creating more sustainable economic vitality in urban, highly congested corridors. They also provide a longer-term management solution than more traditional improvements.

### **How are managed lanes built?**

Managed lanes are generally added to an existing set of lanes or adjacent to an existing corridor. Entrance and exit points are constructed in strategic locations to maximize time savings while using the lanes, provide the option to use the lanes for short segments of a trip or for the whole length, and minimize disruption to existing free lanes.

### **How do managed lanes work?**

Managed lanes operate using an electronic tolling system using transponders mounted on the vehicles to collect tolls. Video cameras capture license plates of users without transponders, who are billed by mail and pay a slightly higher rate to cover the cost of collection. There are no toll plazas and no stopping. Motorists will see signs noting the toll rate and have the option to move into the managed lanes, or remain in the free general purpose lanes. Eligible carpools, vanpools, and other transit and emergency vehicles can drive for free in the managed lanes.

### **Do I have to use them?**

No. No one is required to use the managed lanes. They are simply an option for travelers who want more reliable travel times. Motorists can determine for themselves if the time they will save traveling on the managed lanes is worth the money they will pay to use them.

### **How can I pay to use a managed lane?**

For a nominal fee, you can obtain a transponder and create an online account to which your usage is charged at the lowest available rate. If your vehicle has a transponder, equipment mounted on the gantries

will read the signal and charge your account. If you don't have a transponder, a camera will take a picture of your vehicle's license plate, and you will receive an invoice from our Bill By Mail service about 30 days after your first trip.

### **What is a transponder?**

A transponder is a small radio frequency identification device. Attached to the inside of a vehicle's windshield, it emits a signal to readers attached to overhead toll gantries, which charge the toll to the user's account. You can get a transponder at [NCQuickpass.com](http://NCQuickpass.com).

### **What determines the cost?**

Tolls will vary, depending on the time of day and overall traffic congestion. When managed lanes become too congested, the price will increase, reducing the number of cars entering the lanes and helping maintain reliable travel times. Toll prices will be higher during peak periods when demand is greater and lower during less congested periods. Once a driver enters the managed lanes, the price of that driver's trip is fixed and will not change over the duration of that trip.

### **Aren't tolls just another tax?**

No. Unlike taxation, only drivers who use the managed lanes will be charged. Motorists are given the option to pay to use the managed lanes if they want more reliable travel times. The driver may choose to pay the toll and use the managed lanes for part or all of their trip, or use the general purpose lanes for a portion at no charge.

### **What will be the average price to use the managed lanes?**

Toll rates have not been set yet. Cintra, the company we've contracted with to build and operate the managed lanes, is required by contract to hold public hearings. Citizens are encouraged to attend these meetings, so they can be part of the toll rate setting process.

The price of using the managed lanes will vary as conditions change, depending on consumer demand, rates of speed and overall congestion. Cintra will determine the specific price range and conditions for adjusting the price, which is based on balancing consumer demand and meeting minimum speed requirements in the managed lanes.

### **Is it true that the tolls would cost \$21?**

No. The toll rates have not been established. The \$21 figure that some have reported came from an old study that is not part of the toll rate development process for this project.

### **Aren't managed lanes only for the wealthy?**

No. Research from other states with managed lanes shows that people of all income levels use them. The majority of the drivers who use managed lanes don't use them on a daily basis—only when predictable travel time matters the most. The decision to use a managed lane is based more on the individual's needs and current traffic conditions rather than on income levels. For example, managed lanes can offer more reliable travel times to pick up your kids from daycare or school, getting to the airport to catch a flight or arriving on time to attend a meeting. People of all incomes have these needs from time to time and can benefit from this option.

At the same time, the general purpose lanes become less congested when vehicles move onto the managed lanes. This double-benefit affects every vehicle on that stretch of interstate.

### **How will toll collection be enforced and how will the revenues be used?**

Typically, managed lanes are monitored using video tolling enforcement systems, along with visual patrols from law enforcement. Motorists will be considered violators and subject to penalty if they don't meet carpool occupancy requirements and fail to pay the toll. If a driver doesn't pay the toll, NCDOT can

ultimately place a block on the vehicle's registration, which cannot be renewed until the fee is paid.

Revenues from the tolls will be used first to defray the costs of construction, operations, maintenance and financing. Secondly, they will deliver a reasonable rate of return to private sector investors. If the project performs better than the level projected to meet the first two uses, the state will receive a share of the net to be used for projects in the corridor served by the managed lanes.

### **Since there's no limit on toll prices, won't managed lanes gouge commuters?**

No. Managed lanes must maintain an average speed of 45 miles per hour or higher during peak periods, according to federal law. Maintaining the required speeds while generating revenue is a balancing act. Simply stated, if the toll is too high, people won't use it. However, if tolls are too low, too many drivers will enter the managed lanes, causing congestion, which reduces the average speed.

The operator's goal is to keep tolls reasonable, which will increase the number of paying customers, and encourage better traffic conditions in both the managed and general purpose lanes.

In the end, the managed lanes provide a service to the customer.

### **I don't want to ride on the managed lanes for the full 26 miles. Can I exit in the middle of the project?**

There will be several places where drivers can enter and exit the managed lanes along the 26-mile I-77 corridor:

- I-77 at I-277, at the project's southern end
- I-277 west of I-77, also at the southern end of the project
- I-77 between I-85 (Exit 13) and Sunset Road (Exit 16)
- I-77 between Sunset Road and Harris Boulevard (Exit 18)
- I-77 between Hambright Road and Gilead Road (Exit 23)
- I-77 between Sam Furr Road (Exit 25) and Westmoreland Road

The contract requires only one access point between Exits 13 and 18, but Cintra is proposing two. Cintra can recommend shifting these locations, but any change must be first approved by NCDOT and local stakeholders.

### **Won't managed lanes increase congestion instead of relieving it?**

No. The I-77 managed lanes project will improve traffic flow in the corridor by offering drivers a choice to stay in the general purpose lanes for free or pay a toll to travel in the managed lanes. As more drivers choose to use the managed lanes, traffic congestion in the general purpose lanes will also decrease. This long-term capacity wouldn't otherwise exist without the project. With managed lanes, a certain level of performance must be met so the new lanes don't become congested as soon as they are built. We can't do that with general purpose lanes.

### **Do managed lanes cost a lot more to build than general purpose lanes?**

The capital costs for constructing managed lanes are generally higher (we estimate about 10 percent higher) than that of general purpose lanes because of electronic systems, lane separations and signage specifically for them.

### **Why not just build more general purpose lanes?**

The bottom line is it would be too expensive and take too long to complete the project. The public-private partnership and managed lanes will complete the project within four years instead of the estimated 20 years it would take to secure enough traditional funding to move forward.

In 2007, the Charlotte Regional Transportation Planning Organization (CRTPO) initiated the "FAST Lanes" study to identify the corridors in the Metrolina region that would benefit most from adding managed

lanes. Public outreach during the study revealed that 61% of respondents were in favor of tolling instead of increasing taxes to address the increasing congestion in the area. Support for managed lanes in the Charlotte area is significant.

Under the new Strategic Transportation Investments scenario, it wouldn't be possible to build 26 miles of general purpose lanes on I-77 without exceeding the corridor's funding cap.

Building managed lanes will increase trip reliability, accommodate long-term future demand and increase the people-moving capacity of Charlotte's regional road system.

### **Why build the project as a private-public partnership?**

This funding mechanism brings private equity to the development of public infrastructure (in the case of I-77, the private entity is investing \$260+ million) and creates a revenue stream that is drawn from those who actually use the facility. Partnership with an investor enables us to transfer substantial risks to the private sector in the areas of design, construction, operations, maintenance, tolling and revenue, while adding more lanes in the near-term without the need for a large financial investment from the state that would prevent us from working on other badly needed projects.

### **How did the bidding process turn out, and what is NCDOT's financial contribution to the project?**

The bidding process turned out well. By offering the project to experienced potential partners from all over the world, we were able to gauge the level of risk the market would tolerate and the kind of return on equity that would be required to successfully finance the project. The bid that was ultimately successful came from an experienced developer of these type projects and is on terms that are more favorable than the state had projected. It was a lengthy process, but delivered a positive result.

NCDOT hosted an industry forum in February 2012 for prospective proposers to learn more about the project. The meeting included presentations about the project scope, construction timeline, tolling and financing.

Four potential bidders were shortlisted and participated in more than 70 intensive, one-on-one meetings with NCDOT. These meetings helped us produce several drafts of the final contract documents.

These documents lay out the instructions for bidding, design, construction, maintenance performance requirements and the overarching agreement. They reflect the minimum contract requirements and the public protections that we require (e.g. bonding, insurance, termination rights, revenue sharing, etc.).

In addition, we stated that the maximum contribution from traditional state funding would be capped at \$170 million.

Each of the four bidders conducted exhaustive analyses to determine if they could meet these contract requirements while ensuring that the long-term contract would generate enough revenue to offset their initial investment.

Bidders requested varying amounts of additional state and federal funding beyond the \$170 million, and/or requested that a multitude of the contract requirements be relaxed. We determined that the \$170 million public contribution was reasonable, and the public protections in place in the contract were prudent. The cap would not be increased.

Bids were due on March 31, 2014, and one bidder submitted a compliant technical proposal and financial proposal. The proposals were subjected to roughly 200 pass/fail criteria and further evaluation of the relative merits of their technical proposal.

The apparent best value proposer was announced on April 11, 2014, as Cintra Infraestructuras. Cintra proposed a total project investment of \$655 million, of which only \$88 million is the NCDOT contribution (less than the projected \$170 million contribution).

**Is it true that a foreign company will own the road?**

No. First of all Cintra is an international company with North American Operations based in Austin, Texas. NCDOT retains ownership of the roadway and project, and ensures the private partner maintains performance specifications set in the contract. If the partner doesn't meet those terms, we may decide to impose fines and fees.

Cintra makes a practice of hiring local and regional contractors, subcontractors, designers, material suppliers and other vendors in its project areas. More than 90 percent of contracts awarded on new capacity projects in the United States go to locally based firms who take on a large share of the work needed to design, construct and maintain the project. Up to 100 local firms will be involved in the I-77 managed lanes project, creating 15,000–20,000 jobs during construction.

**What's the private partner's role during the 50-year contract?**

The private partner will be responsible for managing the design, construction, finance and operation of the project, as well as the maintenance of the managed lanes and the existing general purpose lanes. According to the contract, the private partner is required to hand the roadway back to us in good condition at the end of the term.

**Can the contract be terminated if the partnership fails?**

Yes. NCDOT retains rights to terminate the contract if we determine that it is in our best interest, if the developer defaults or if something happens beyond the control of either party.

**What are the next steps?**

State law requires certain reporting to the Joint Legislative Transportation Oversight Committee and Joint Legislative Commission on Governmental Operations. These reports were presented to the committees in April 2014. On June 26, 2014, NCDOT signed a comprehensive agreement with Cintra. Now, design, site investigation work and permitting can begin. Cintra will also secure loans and private equity leading to "financial close" in the fourth quarter of 2014. After financial close, permits will be secured, and construction can get under way. The project is scheduled for completion in 2018.